

Amendments to the Claims

1. (Currently Amended) A system for coating an implantable medical device with a coating composition, comprising:

a reservoir holding a coating composition;

an applicator including a coating surface and a porous region in fluid communication with the coating composition in the reservoir, wherein the porous region is capable of conveying the coating composition from the reservoir to the coating surface; ~~and~~

a support element to support an implantable medical device in close proximity to or in contact with the coating surface of the applicator; and

a temperature controller in communication with the applicator, the support element or the reservoir for heating or cooling the coating composition.

2. (Original) The system of Claim 1, wherein the applicator comprises a hollow tubular body having a bore, the bore being configured to received the device.

3. (Original) The system of Claim 1, wherein the applicator comprises a half-tubular body configured to receive the device.

4. (Original) The system of Claim 1, wherein the coating surface comprises a completely or substantially flat substrate on which the device can be placed.

5. (Original) The system of Claim 1, wherein the porous region comprises pores having an average pore radius of about 0.1 microns to about 1000 microns.

6. (Original) The system of Claim 1, wherein the porous region has a porosity of about 20% to about 60%.

7. (Canceled).

8. (Original) The system of the Claim 1, wherein the porous region comprises a first sub region and a second sub region, such that the first sub region has an average pore size that is smaller than the average pore size of the second sub region.

9. (Original) The system of Claim 8, wherein the second sub region is disposed above the first sub region.

10. (Original) The system of Claim 1, additionally including an apparatus to rotate the support element.

11. (Original) The system of Claim 1, wherein the implantable medical device comprises a tubular shape having a hollow, longitudinal bore, and wherein the applicator is configured to fit into the hollow, longitudinal bore of the device.

12. (Original) The system of Claim 1, wherein the applicator is movable in a linear direction.

13. (Original) The system of Claim 1, wherein the device is a stent.

14. (Original) The system of Claim 1, further comprising a pressure apparatus to apply pressure to the composition in the reservoir to force the composition to travel through the porous region and onto the coating surface.

15. (Original) The system of Claim 1, wherein the applicator is made from a ceramic or polymeric material.

16. (Original) The system of Claim 1, wherein the applicator is made from a rigid material such that the coating surface does not comply when the device contacts the coating surface.

17. (Original) The system of Claim 1, further comprising a pressurizing device in communication with the applicator or the reservoir for enhancing the conveyance of the coating composition from the reservoir to the coating surface.

18. (Original) The system of Claim 1, wherein the applicator comprises:
a first section having a porous region to be placed into the coating composition in the reservoir; and
a second section having a porous region in fluid communication with the porous region of the first section, the second section being disposed over the first section so as to provide a space between the second section and the coating composition in the reservoir, wherein the second section includes the coating surface to coat the implantable medical device.

19. (Previously Presented) The system of Claim 18, wherein the second section of the applicator comprises a hollow tubular body having a longitudinal bore configured to receive the implantable medical device.

20. (Original) The system of Claim 18, wherein the porous region of the first section has an average pore size smaller than the average pore size of the porous region of the second section.

21. (Currently Amended) An applicator for coating an implantable medical device with a coating composition, comprising:

a reservoir containing coating composition;
a hollow tubular body received in the reservoir and having a bore configured to receive an implantable medical device; and

a plurality of fibers disposed along the bore of the body ~~[[,]]~~ and in fluid communication with the fibers configured to receive a coating composition contained in the reservoir, to apply the coating composition to the implantable medical device wherein the fibers and bore are configured such that the implantable medical device, when received in the bore, is coated with coating composition as a result of external pressure applied to the tubular body.

22. (Original) The applicator of Claim 22, wherein each of the fibers comprise a plurality of filaments.

23. (Currently Amended) A system for coating [an] a luminal surface of an implantable medical device with a coating composition, comprising:

a reservoir to hold a coating composition; ~~and~~

an applicator configured for being received within a bore of the medical device, the applicator including a coating surface and a porous region in communication with the coating composition in the reservoir, wherein the porous region is capable of loading the coating surface with the coating composition from the reservoir by capillary action; and

a member configured to hold the medical device and allow the loading of composition on the luminal surface by the applicator while the member holds the medical device.

24. (Original) The system of Claim 23, wherein the device is a stent and the coating composition is a polymer dissolved in a solvent and optionally a drug added thereto.

25. (Withdrawn) A method of coating an implantable medical device, comprising:
positioning a part of an applicator in a reservoir having a coating composition, the applicator including a coating surface and a porous region capable of conveying the coating composition from the reservoir to the coating surface;

allowing the coating composition to be conveyed to the coating surface; and
transferring at least some of the coating composition from the coating surface onto an
implantable medical device.

26. (Withdrawn) The method of Claim 25, wherein the applicator includes a hollow
tubular body, such that the transferring of the coating composition comprises inserting the
medical device into the hollow tubular body.

27. (Withdrawn) The method of Claim 26, wherein the device is moved in a linear
direction and/or rotated within the hollow tubular body.

28. (Withdrawn) The method of Claim 26, wherein the medical device is inserted in
one end of the hollow tubular body and removed out from the opposing end of the hollow tubular
body.

29. (Withdrawn) The method of Claim 25, wherein the coating surface comprises a
completely or substantially flat substrate and wherein the transferring of the coating composing
comprises rolling the implantable medical device on the coating surface.

30. (Withdrawn) The method of Claim 25, wherein the viscosity of the coating
composition is about 10 centipoises at ambient temperature and pressure to about 100 centipoises
at ambient temperature and pressure.

31. (Withdrawn) The method of Claim 25, wherein the device is a stent.

32. (Withdrawn) The method of claim 27, further comprising applying a pressure to
the composition in the reservoir for enhancing the conveyance of the coating composition from
the reservoir to the coating surface.

33. (Withdrawn) A method of coating an implantable medical device, comprising:

exposing a portion of an applicator to a coating composition, the applicator including a coating surface;

allowing a layer of the coating composition to be formed on the coating surface of the applicator by capillary action; and

transferring at least some of the coating composition from the coating surface onto an implantable medical device.

34. (Previously Presented) The system of Claim 1, wherein the applicator has a uniform pore pattern.

35. (Previously Presented) The system of Claim 1, wherein the applicator includes a network of interconnected pores.

36. (Previously Presented) The system of Claim 1, wherein the applicator includes pores that are sized such that particles within the coating composition that exceed a predetermined size are not capable of being conveyed to the coating surface.

37. (Previously Presented) The system of Claim 21, wherein the fibers comprise filaments or capillaries prearranged to extend in a parallel fashion.

38. (Previously Presented) The system of Claim 1, wherein a portion of the applicator is partially submerged in coating composition.

39. (Currently Amended) A system for coating an implantable medical device with a coating composition, comprising:

a reservoir of coating composition;

an applicator in fluid communication with the reservoir, the applicator including a porous coating portion having a coating surface, and a porous portion for conveying coating

composition from the reservoir to the coating portion, wherein the length and/or width of the coating portion is substantially greater than the length and/or width of the porous portion

an applicator including a coating surface and a porous region in fluid communication with the reservoir, wherein the porous region is capable of conveying coating composition from the reservoir to the coating surface; and

a support element to support an implantable medical device in close proximity to or in contact with the coating surface of the applicator.

40. (Previously Presented) The system of Claim 39, wherein the coating surface is horizontally disposed above the reservoir.

41. (Previously Presented) The system of Claim 39, wherein a portion of the applicator is partially submerged in the reservoir.

42. (New) The system of Claim 39, wherein the reservoir has walls and the walls, the porous portion and the coating portion form a closed space containing at least a portion of the coating composition contained in the reservoir, further including:

a pressure device in fluid communication with the space and configured for regulating the coating composition conveyed to the coating surface by regulating the pressure in the space.

43. (New) the system of Claim 42, wherein a surface of the coating portion facing the coating composition contained in the space is sealed.

44. (New) The system of Claim 39, wherein the coating portion includes a coating surface formed by a horizontally disposed cylinder.

45. (New) the system of Claim 39, wherein the coating portion has a first average pore size and the porous portion has a second average pore size that is smaller than the first average pore size.